

ABSTRACT

The present invention provides a method of inspecting a target component part (e.g., valve casing) of an apparatus (e.g., steam control valve) included in a steam turbine system. When a time period in a range of 24 to 100 hours passes from the shutting-down of the turbine system, or before a temperature of an atmosphere surrounding the component part is lowered to 100°C, the width of the opening of the crack formed in the component part or a clearance relating to the component part is measured without disassembling the target component part and an enclosing member (e.g., valve casing) from the apparatus. As the measurement is performed when a thermal stress is induced in the component parts or when the temperature distribution is wide, the risk level of the crack or the clearance is determined accurately.